



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/854,608	05/15/2001	Yoshihisa Kimura		1725

30132 7590 08/19/2003

GEORGE A. LOUD
3137 MOUNT VERNON AVENUE
ALEXANDRIA, VA 22305

EXAMINER

PARKER, KENNETH

ART UNIT

PAPER NUMBER

2871

DATE MAILED: 08/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/854,608

Applicant(s)

KIMURA ET AL.

Examiner

Kenneth A Parker

Art Unit

2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 May 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☒ Claim(s) 32 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-31 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for devices having all of the features of claim 32, does not reasonably provide enablement for claims missing some of these features. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make or use the invention commensurate in scope with these claims. This is based upon applicants argument regarding the difficulties in making a device with the claimed characteristics.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7, 13-15, 21-24, 27-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maekawa US 6164785 in view of Konno et al, US

Art Unit: 2871

5607764 and Etori et al 6348960 (or it's priority document) and Mizobata et al 6266112.

Here the diffuser properties listed are simply those which everyone tries to optimize, low backscattering (high throughput), high distinctness, high haze, and are therefore obvious for that reason. Konno evidences this with discussion of luminance and visibility, two alternative descriptions of the same characteristics (col. 5 lines 16-65). Internal haze will be low as the index of refractions of the different mediums match. Haze is the principal function of a diffuser, so making it as high as possible is obvious based upon the definition of the diffuser itself.

The claimed ranges, claims 21-32 deal with the weight dispersion ratio, claims 4-6 deal with the sheet thickness, claims 7-12 relate to the particle size and claims, all either overlap or are significantly similar to the ranges that are employed in the reference and therefore do not patentably distinguish over the reference.

Claims 1-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Satoh et al US 5847795 in view of Konno et al, US 5607764 and Etori et al 6348960 (or it's priority document) and Mizobata et al 6266112.

Here the diffuser properties listed are simply those which everyone tries to optimize, low backscattering (high throughput), high distinctness, high haze, and are therefore obvious for that reason. Konno evidences this with discussion of luminance and visibility, two alternative descriptions of the same characteristics

Art Unit: 2871

(col. 5 lines 16-65). Internal haze will be low as the index of refractions of the different mediums match. Haze is the principal function of a diffuser, so making it as high as possible is obvious based upon the definition of the diffuser itself.

The claimed ranges, claims 21-32 deal with the weight dispersion ratio, claims 4-6 deal with the sheet thickness, claims 7-12 relate to the particle size and claims 13-20 relate to the particle size distribution, all either overlap or are significantly similar to the ranges that are employed in the reference and therefore do not patentably distinguish over the reference.

Claims 1-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takashima et al US 5903391 in view of Konno et al, US 5607764, Etori et al 6348960 (or it's priority document) and Mizobata et al 6266112.

Here the diffuser properties listed are simply those which everyone tries to optimize, low backscattering (high throughput), high distinctness, high haze, and are therefore obvious for that reason. Konno evidences this with discussion of luminance and visibility, two alternative descriptions of the same characteristics (col. 5 lines 16-65). Internal haze will be low as the index of refractions of the different mediums match. Haze is the principal function of a diffuser, so making it as high as possible is obvious based upon the definition of the diffuser itself. This is further evidenced by the Etori and Mizobata discussions relating to either the haze and distinctness of image measures or the clarity verses diffusing effect.

The claimed ranges, claims 21-32 deal with the weight dispersion ratio, claims 4-6 deal with the sheet thickness, claims 7-12 relate to the particle size and claims 13-20 relate to the particle size distribution, all either overlap or are significantly similar to the ranges that are employed in the reference and therefore do not patentably distinguish over the reference.

Claims 1-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yano, US 5706065 in view of Konno et al US 5607764, Etori et al 6348960 (or it's priority document) and Mizobata et al 6266112.

Here the diffuser properties listed are simply those which everyone tries to optimize, low backscattering (high throughput), high distinctness, high haze , and are therefore obvious for that reason. Konno evidences this with discussion of luminance and visibility, two alternative descriptions of the same characteristics (col. 5 lines 16-65). Internal haze will be low as the index of refractions of the different mediums match. Haze is the principal function of a diffuser, so making it as high as possible is obvious based upon the definition of the diffuser itself.

This is further evidenced by the Etori and Mizobata discussions relating to either the haze and distinctness of image measures or the clarity verses diffusing effect.

The claimed ranges, claims 21-32 deal with the weight dispersion ratio, claims 4-6 deal with the sheet thickness, claims 7-12 relate to the particle size and claims 13-20 relate to the particle size distribution, all either overlap or are

Art Unit: 2871

significantly similar to the ranges that are employed in the reference and therefore do not patentably distinguish over the reference.

Allowable Subject Matter

Claim 32 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicants arguments that the examiners positions is that haze and image clarity are the same thing is a misunderstanding of the position of the examiner- it is that has is the same as the qualitative description of diffusing, and that distinctness of image is the same as clarity, or any equivalent qualitative description of the reduction in visibility due to blurring.

Additional references have been presented each of which discussed haze and image distinctness (directly or through qualitative description), further supporting the examiners position that the features were well known goals of the optimization.

Based upon applicant's assertion of the difficulties of achieving the claimed haze and image distinctness, rejections under 112 have been applied to

Art Unit: 2871

all claims except 32, which is understood to fully describe applicant's invention and therefore meet the enablement requirement.

Applicant's arguments appear to be asserting unexpected results. As attorneys arguments cannot take the place of evidence, these arguments are unpersuasive. Applicant's 132 affidavit has been considered, but it is not persuasive the comparison to the Select reference is actually to the furthest reference, one which does not even meet the claimed structure of an uneven surface.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth A Parker whose telephone number is 703-305-6202. The examiner can normally be reached on 9:30-6:00.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William L. Sikes can be reached on 308-4842. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 308-0956.

Application/Control Number: 09/854,608

Art Unit: 2871

Page 8



Kenneth A Parker
Primary Examiner
Art Unit 2871

August 7, 2003